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Linda Hall Library

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A LIBRARY OF FIRST RESORT FOR SCIENCE, ENGINEERING, AND TECHNOLOGY: THE LINDA HALL LIBRARY

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Linda Hall Library, United States of America

In January 1995, an event of major significance for users of scientific and engineering information occurred in New York City at the Beekman Towers Hotel, near the United Nations buildings and, more significantly, across the street from the United Engineering Trustees (UET) building. The event was a ceremony to transfer the entire collection of the Engineering Societies Library (ESL), located on five floors within the UET building, to the Linda Hall Library of Kansas City, Missouri.

Several libraries were interested in the Engineering Societies Library. The United Engineering Trustees chose the Linda Hall Library in part because of its commitment to catalog the collection online and to make it internationally accessible through a state-of-the-art electronic system. The Linda Hall Library also provides a fast and efficient document delivery service, maintains and preserves the integrity of the collection, and ensures safe keeping of the ESL materials. Already the largest privately funded science and technology library in the United States, the Linda Hall Library now, as the result of this transfer, has become one of the foremost engineering libraries as well.

Months of negotiations, planning, selection, and even judicial review culminated in the beginning of the move from the Engineering Societies Library on Monday, April 24, 1995. A second phase in August 1995 will complete the move, which is being carried out by National Library.

Relocations, a moving company that specializes in moving libraries. The recataloging project is under way, as is the expansion of services to users of both libraries. One objective in planning for the move was to identify the most highly used materials and move them first, making them available to users from their new home in Kansas City as quickly as possible. Papers and preprints of the engineering societies were among the materials that were unloaded from the first truck. These were taken out of the boxes and placed on the first of the 18,000 linear feet of waiting shelves in the Linda Hall Library on Monday, May 1, 1995, one week after the move began. The next morning, Tuesday, before 9:00 a.m., staff in the Document Services Department began servicing those materials. Some twenty requests were filled for users far removed from Kansas City who were looking for copies of specific papers delivered at recent engineering conferences and symposia. Use of these materials has been constant ever since.

Not all requests were for recent materials. The ESL rare books were also on the first truck, and the library responded on that same Tuesday to a reference request for a rare book published in 1606. The book is by a seventeenth-century chemical philosopher named Jean Riolan, and the ESL copy is one of three copies known to be in the United States (the others are both in Massachusetts, at Harvard University and the American Antiquarian Society). Riolan's work was on the shelf in its new home in the library's rare book vault, placed there the previous Saturday along with the rest of the ESL rare book collection.

The Linda Hall Library's response to these requests for both old and new materials was based on its commitment to share, as widely and efficiently as possible, the collections of the Engineering Societies Library with which it has been entrusted.

This is not the first time the Linda Hall Library has accepted such a challenge. In 1946, the same year the library opened to the public, the library's Trustees purchased the Library of the American Academy of Arts and Sciences (AAAS). The decision to acquire the AAAS library was consistent with the mission of the newly founded Linda

Hall Library. The director was charged to create a first-class scientific and technical library, along the lines of the well-established John Crerar Library in Chicago. And, like the John Crerar, it would join the ranks of other major independent research libraries, such as the Newberry Library, the Folger Shakespeare Library, and the Huntington Library, to form the Independent Research Libraries Association (IRLA) in 1972.

Membership in IRLA depends upon three major criteria: 1. the library must have a research collection of national and international significance, capable of supporting sustained research; 2. it must be independent of any other organization or government agency and be privately endowed; and, 3. its primary purpose must be to develop a collection and share it with the public.

The Linda Hall Library was created as an independently funded public library by Kansas City grain merchant Herbert Hall and his wife Linda, for whom the library is named. The library's operating income is generated from the endowment left by the Halls, who had no children and left their entire estate for the creation of a library that would be open to the public on the fourteen-acre site of their former home in Kansas City. A governing board of five trustees decided that a research library, covering the pure and applied sciences, excluding medicine, could most benefit the Kansas City area.

The chance to acquire the library of the AAAS was fortuitous to say the least. The AAAS was founded in 1780 and is the second-oldest learned academy in the United States. Its library was rich in continuous and early runs of scientific journals and monographs, many acquired through exchange programs with more than four hundred national and international partners. Thousands of other volumes were acquired through purchases and gifts, including rare and significant books from the fifteenth century onward. The American Academy of Arts and Sciences is located in Boston, however, and most of the collection was duplicated by other libraries in the area. The Academy decided to sell the collection, negotiated a price with Linda Hall Library's trustees, and

sent the books to Kansas City. There, at the Linda Hall Library, users from around the world continue to have access to the AAAS library collection.

The AAAS library provided an extraordinarily strong foundation for the Linda Hall Library. Collection development in the years since the purchase concentrated on filling gaps in the historical holdings and on securing as much as possible of the world's current scientific and technical literature. The Academy's collection was weighted in favor of the physical sciences over the biological sciences, and this emphasis is still reflected somewhat in the collection today, even though the life sciences are also strongly represented.

The library has emphasized collecting serials, research monographs, conference and symposia proceedings, engineering specifications and standards, and technical reports. The American Academy's exchange program, one of the first in the U.S., has been continued and expanded, so that the library now has over 470 exchange partners around the globe who provide a large and steady flow of foreign research publications, with special emphasis on materials in Cyrillic and Eastern European languages.

The Linda Hall Library was the resource library for *Applied Mechanics Reviews* for nearly forty years. As a result, the library collected exhaustively in the area of applied mechanics.

After fifty years of collection development in science, engineering and technology, the results may be summarized with the following notable highlights:

Linda Hall Library Collection:

- More than 40,000 serial and journal titles;
- More than 300,000 monographs;
- Extensive collection of Conference and Symposium Proceedings;
- More than 1.5 Million Technical Reports, including NASA, DOE, and other U.S. Government- contracted Reports;
- Over 150,000 Standards and Specifications;

- U.S. Patent and Trademark Depository Library;
- U.S. Government Documents, including Geological Survey maps;
- History of Science Collection, dating from the 15th century.

Within its defined areas of the pure and applied sciences, the Linda Hall Library has become a source that users can rely upon for materials they will find nowhere else. No library has everything, however, and when requests for engineering information could not be filled from the library's resources, reference librarians would confidently refer users to the Engineering Societies Library in New York City.

The Engineering Societies Library had developed over the years into the preeminent collection for engineering-related materials. Indeed, it had the reputation of being the largest engineering library in the Western World. It was the depository library for the five major engineering societies who had founded it, The American Institute of Chemical Engineers (AIChE), the American Institute of Mining, Metallurgical and Petroleum Engineers (AIME), the American Society of Civil Engineers (ASCE), the American Society of Mechanical Engineers, (ASME), and the Institute of Electrical and Electronics Engineers (IEEE). Several sister societies also used the ESL as a depository for their publications. Preprints and papers from the various societies' meetings could sometimes be found at the ESL and nowhere else. A document delivery service provided international access to the collection, while a reading and reference room on the second floor of the United Engineering Trustees building offered convenient access to the collection for local users.

The governing body for the Engineering Societies Library was the United Engineering Trustees, representing the five engineering societies that founded the ESL. In 1993, the UET decided to discontinue its support of the library, and began to examine the possibilities for a responsible and viable dispersement of the collection.

The UET understood the significance that the ESL had achieved as a major resource, and knew also that they had a responsibility to find a way to continue the library and its services in an effective way. A search began for ways to transfer, not only the

entire collection, but also the obligations related to the collection -- those of preserving it, continuing its development, and providing services to the international clientele of users who depend upon it.

The library began as individual libraries for each of the founder societies. These were combined in the early part of the twentieth century, after the societies themselves formed a collective organization in 1907 and moved their headquarters to a building in New York City, a process funded by Andrew Carnegie. From the time it was created, the ESL was immediately recognized for the unusually high quality of its collections. These had grown until, at the time of the transfer in 1995, the estimated size of the collection was approximately 360,000 volumes. These occupied five floors of stacks and approximately 25,000 square feet at the UET building in New York City.

The collections dated from the fifteenth century, with strengths in scientific and engineering serials, monographs, conference proceedings, U.S. government documents, technical reports, and society specifications and standards. Parallels between the ESL and the collection of the Linda Hall Library were obvious and easy to identify. But the depth of coverage in engineering was also readily apparent. The broad range of topics covered standard chemical handbooks and civil engineering textbooks, esoteric engineering journals, and detailed construction plans for municipal sewer plants, the Eiffel Tower, and the Panama Canal.

Specific strengths included the holdings of conference proceedings and unpublished preprints of papers presented at founder society meetings. Holdings of monographs and conference proceedings from the ESL published before 1946, the year the Linda Hall Library opened, will add significant depth to the Linda Hall Library monograph collection. The collection of United States government documents at the Linda Hall Library will grow significantly with the addition of long runs of titles from agencies such as the U.S. Geological Survey and the U.S. National Advisory Committee for Aeronautics.

A collection of superseded international standards and specifications at the ESL is a unique archival source for many of these publications. Several thousand volumes of historical significance, including both rare monographs and serials, are an important aspect of the library. Approximately 5,500 current and non-current serial titles are included in the collection.

Some of the long runs of serials will fill gaps in Linda Hall Library's already strong serials collections, including titles such as *Annales des Mines*, *Transactions of the South African Institute of Electrical Engineers*, and *Berg- und huettenmaennische Monatshefte*. Other serials are new to the Linda Hall Library collection, such as *Proceedings of the Liverpool Geological Society*, *Deep Foundations Journal*, *Engineering Computations*, and *European Rubber Journal and Urethanes*.

Use of the ESL collection was extensive. Document delivery had been part of the library's services from a very early date, and had reached a reported level of more than 400 requests per day during the 1980s. The ESL had long been a leader in providing this type of library service. It was known for its ability to provide access to its collections, not only for members of the societies who supported it, but for anyone in need of engineering information. When they decided to discontinue the library, the United Engineering Trustees had to consider the fate of the collection and the possibilities for continuing access to engineering information needed by society members and other users.

Early in 1993, the Linda Hall Library indicated to the UET an interest in discussing the transfer of the collection to Kansas City. From the library's perspective, the possibility seemed too remote to be real. It seemed more likely that a library in New York, or a consortium of libraries in the northeast United States, or possibly the Library of Congress would receive the collection. There were obstacles to all of these other possibilities, however, and the UET contacted the Linda Hall Library later in the year to see if there was still an interest in discussing a transfer to Kansas City.

The Linda Hall Library Board of Trustees authorized an immediate positive response. A formal proposal from the Linda Hall Library offered the following points:

The Linda Hall Library would:

1. accept the entire collection, excepting duplicates and out-of-scope materials (there are some business-related items in the ESL that are not consistent with the collecting policy at the Linda Hall Library);
2. accept the responsibility and expense for moving all the materials from New York to Kansas City;
3. coordinate the disposition of materials not selected for transfer to Kansas City, first with the five Founder Societies, and then with other interested libraries;
4. catalog the materials in a computer-based database and provide international access to that database;
5. provide reference and document delivery services from the collection;
6. continue collection development consistent with the collection development policy of the Linda Hall Library;
7. take appropriate preservation and conservation measures to ensure the preservation of materials from the ESL.

The UET issued a final request for proposals to all interested libraries. After reviewing the proposals, the UET chose the Linda Hall Library to receive the entire collection, with the exception of the Wheeler Gift Collection.

The Wheeler Gift Collection of approximately 6,000 items on early electricity and magnetism was the most famous special collection at the ESL. The collection had been put together by the English electrical engineer Josiah Latimer Clark, who attempted to acquire all publications of value on the subjects of electricity and magnetism and their applications. After Clark's death in 1898, the collection was purchased by an American electrical engineer, Schuyler Skaats Wheeler, who gave it to the library of the American Institute of Electrical Engineers (AIEE), the forerunner of the IEEE, in 1901. The Wheeler Gift Collection thus came into the collection of the ESL when the libraries of the founder societies merged to create a single library. One of the

conditions of the Wheeler gift was that the collection be kept in New York City, available for use by the general public.

If no other library in New York City had wanted the collection, the Linda Hall Library and the UET were prepared to ask the New York State attorney general and the New York State Supreme Court for a legal ruling allowing the collection to be moved to Kansas City. It would have been incorporated into the Linda Hall Library's rare book collection on the History of Science, which is strong in the broad area of physical science and has for many years emphasized the history of electricity and magnetism. The Wheeler Gift Collection and Linda Hall Library's History of Science Collection would have complemented one another very well.

The collection would not have been in New York City, however. A celebrated library in New York, the New York Public Library (NYPL), was also very interested in receiving the Wheeler Gift Collection. The UET decided to separate the Wheeler Gift Collection from the ESL and transfer it to NYPL, where it will become part of that library's distinguished rare book collection.

The Wheeler Gift Collection was only one example of the way the ESL grew from its association with the founding engineering societies. From its earliest days the ESL served as a depository for all publications of the five societies that supported it. Other associated societies also deposited their publications, making the library an invaluable reference source for a large body of engineering literature. Users were assured that copies of publications from the five societies could always be found at the ESL. In addition, many of the unpublished papers from society meetings were also deposited in the library, making it the only source for a body of literature that is frequently cited but available in no published source, other than as an abstract.

These society publications are now at the Linda Hall Library, and the depository arrangements will continue. The Linda Hall Library will be the official, non-govern-

mental, depository site for publications of the five founding societies, although some details of the arrangements await resolution.

Now that depository arrangements are in place with the five founder societies, the Linda Hall Library will pursue an expanded depository program. All scientific and technical societies will be encouraged to consider naming the Linda Hall Library as a depository for their publications. The economic benefit to the library is obvious. If these publications are deposited, rather than purchased, more funds will be available for the purchase of other supporting materials. This is a secondary consideration, however.

The primary goal for the depository program is to establish one guaranteed source for any society publication, a source committed to fast, cost effective, and reliable service. It would also be a source committed to the long-term preservation of the informational content of the materials. The societies themselves, as publishers, can provide copies of the most recent publications, but often have no supply or access to their own publications that have been superseded by later editions, or are more than a few years old. A depository arrangement would benefit the society and its membership by assuring access to the retrospective publications of the society, as well as to the current materials. Payment of copyright royalties to a society, for use of its publications that exceeds fair use, will compensate a society for loss of potential sales of its publications.

The Linda Hall Library is eager to accept the responsibility of depository arrangements with societies from all countries. We ask our colleagues in the library world to support this international initiative for sharing resources. By providing universal access to an important body of literature, all users of scientific, engineering, and technical information will benefit.

The benefits derive from the Linda Hall Library's commitment to serve an international clientele of users -- any user, anywhere, either an individual, or a corporate user,

or another library. As an independent research library, the Linda Hall Library is not constrained by obligations to a limited community of users defined by a parent organization, such as an academic community which a university library must serve first. The community of users served by the Linda Hall Library is more difficult to define. For some, in our own region, we are a local library available for easy access by a visit. For others, access is through a long-distance medium, traditionally the mail and telephone but now expanding to courier, fax, and other electronic modes of access.

The Linda Hall Library is striving to be a library of first resort, not last choice, for any information related to its subject specialties of science, engineering and technology. Improving access and making it easier for users to contact the library is one way of doing this. Making sure that services are fast, reliable, and cost effective is another.

Users of the library's reference services, for example, will receive assistance in locating information in the library, but will also get help locating sources for any materials not owned by the library. The Document Services department is committed to responding to all accurate and in-scope requests for photocopies or interlibrary loans within twenty-four hours. Rush services are available for an even faster response (i.e., eight hours, or three hours for super rush service).

In October 1994, the library inaugurated its first online catalog, a state-of-the art information system named LEONARDO. The name, LEONARDO, is not an acronym, but is a symbolic tribute to all scientists, engineers, artists, and creative thinkers, whose work is represented and made accessible through this system. LEONARDO was initially available only to users within the library, and included approximately 85% of the library's monograph and serials holdings information. The database is growing, however, and retrospective conversion is scheduled to be completed for the monographs in 1996, and for the serials soon thereafter. The library plans to subsequently include government documents, standards and specifications, maps, technical reports, and other collections. The database already includes some materials

from the ESL collection, and all ESL monographs and serials are scheduled to be completely represented in LEONARDO in 1996. LEONARDO also will provide access to a variety of in-house databases and to resources on the Internet.

LEONARDO uses Ameritech Library Services' Horizon client-server software, and offers a beautifully functional graphical user interface, for those who have the client software, that is extremely effective and easy to use. Users will have the option of connecting to LEONARDO from remote sites via the Internet (telnet access) in the near future. Since LEONARDO is designed to be fully compatible with Z39.50 standards, remote users, who are familiar with the searching techniques of another system, will find they can search LEONARDO using their system's interface (assuming their system also complies with Z39.50). A home page on the WWW for the Linda Hall Library (located at URL: <http://www.lhl.lib.mo.us/>) will be one of the easier ways to contact the library. This will provide a WWW-Z39.50 interface to gain access to LEONARDO, and also will allow library users to request assistance from the Reference Department and photocopies from the Document Services Department. LEONARDO is one way of making the ESL collection available as widely as possible, a job the Linda Hall Library expects to complete, as noted, within two years. While sharing the ESL collection with the world is a major objective, it is no more important than sharing the Linda Hall Library's entire collection through a variety of reference and document services.

In addition to developing LEONARDO, other recent service improvements include toll-free telephone access and options for Internet access, including E-mail, RLG's Ariel software, and the recently developed home page on the World Wide Web. The library is a long-time member of OCLC. It also joined RLG in 1994, and contributed its records to the RLIN database. Users of either system can determine if an item is owned by the Linda Hall Library and then request photocopy or loan through the interlibrary loan features of the two systems. Fast electronic delivery is offered by fax or by Ariel, in addition to courier and other surface delivery options.

A new added-value service, popular with many users, allows requests for photocopies to be sent to the library in the form of a list, rather than on standard interlibrary loan forms. That is, users may submit a bibliography or list of citations, and let Linda Hall Library staff use their expertise to, first, interpret the bibliographic information from the citation, and then determine whether that item is available at the Linda Hall Library. Photocopies or interlibrary loan can then be supplied for all available items, and the user referred to other sources for items that are unavailable at the Linda Hall Library. A research service is planned for the near future. Reference staff will perform subject searches for users and then, if requested by the user, supply copies of the available citations.

Users of Linda Hall Library's Document Services enjoy fast service at low cost, and may establish deposit accounts with the library, pay by check on receipt of invoices, or use major credit cards. High-volume users take advantage of a reduced-fee schedule, calculated from the savings to the library of simplified ordering, dispatch, and billing routines for these users.

The following is a summary of the variety of access options and services:

ADDRESS: Linda Hall Library 5109 Cherry St. Kansas City, Missouri 64110-2498

REFERENCE SERVICES:

Telephone: (816) 363-4600
Toll-Free: (800) 662-1545
Fax: (816) 926-8790
E-mail: moellerm@lhl.lib.mo.us

DOCUMENT SERVICES (Interlibrary Loan):

Telephone: (816) 363-5020
Toll-Free: (800) 662-1545
Fax: (816) 926-8785
E-mail: requests@lhl.lib.mo.us

OCLC Symbol: LHL
RLIN Symbol: MOHG
Ariel Address: 198.209.22.122
Mail or Express: Attn: Document Services

Acquisition of the Engineering Societies Library is but one of many recent initiatives at the Linda Hall Library so that it may serve the world's users of scientific, engineering, and technical information. A mission statement, recently reformulated, emphasizes the library's obligation to develop and preserve its specifically defined collection, and guides the development and provision of services to users seeking access to that collection.

Mission: The Linda Hall Library will develop, organize, preserve, and provide access to a pre-eminent collection in certain disciplines in science, engineering, and technology; will offer high-quality, efficient services for the location of scientific, engineering, and technical information, wherever located; and, using all of its resources, will foster science education and provide support for local, regional, national, and international education, research and development.

All libraries must, of course, be prepared to meet the changing needs of their community of users. With the acquisition of the Engineering Societies Library collection, the Linda Hall Library has developed a collection and services that, now more than ever, make it a resource for an international community of users. The obligation to serve as a library of first resort for all users of scientific, engineering, and technical information is both a challenge and a privilege to fulfill.

Abbreviations

AAAS	American Academy of Arts and Sciences
AIChE	American Institute of Chemical Engineers
AIEE	American Institute of Electrical Engineers
AIME	American Institute of Mining, Metallurgical and Petroleum Engineers
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
ESL	Engineering Societies Library
IEEE	Institute of Electrical and Electronics Engineers
IRLA	Independent Research Libraries Association
NYPL	New York Public Library
OCLC	Online Computer Library Center, Inc.
RLG	Research Libraries Group
RLIN	Research Libraries Information Network
UET	United Engineering Trustees